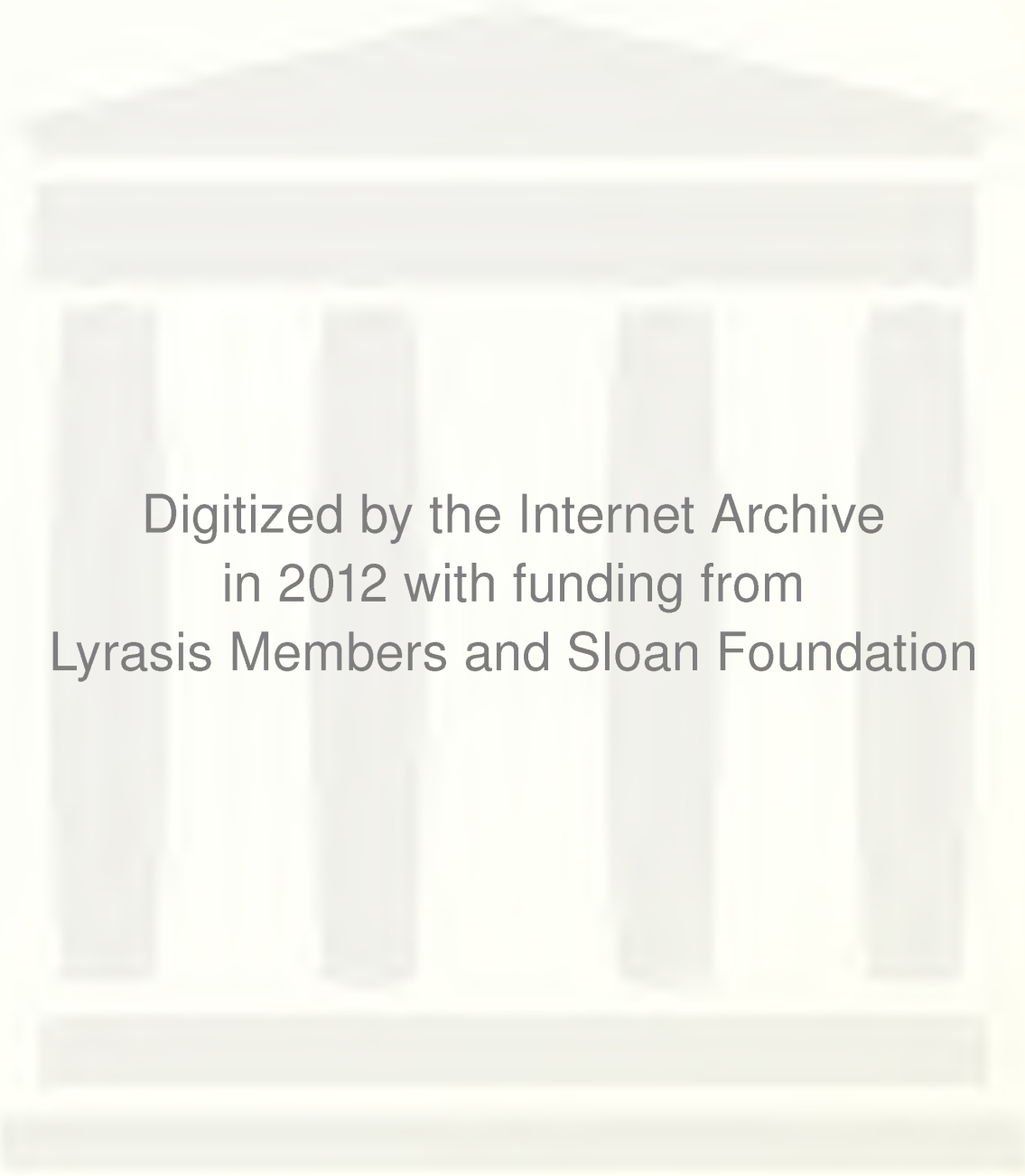


**VOCATIONAL TRAINING IN RESIDENTIAL SCHOOLS
FOR THE BLIND**

W. G. SCARBERRY



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W. G. Scarberry

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We are indeed sorry that it is impossible to reproduce the illustrations and tables mentioned in the text. If, however, you desire more detailed information, we shall be glad to supply the same.

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RESIDENTIAL SCHOOLS FOR THE BLIND

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RESIDENTIAL SCHOOLS FOR THE BLIND

A Thesis Presented for the
Degree of Master of Arts
By
W. G. Scarberry, A.B.

THE OHIO STATE UNIVERSITY
1935

Approved by:

Charles Scott Berry

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CHAPTER I

INTRODUCTION

Education in residential schools for the blind has the same objectives as those generally recognized in schools for the seeing. We quote from the Ohio High School Standards: "The objectives of education are (1) Health (2) Making a living (3) Citizenship (4) Character (5) Worthy home membership (6) Right use of leisure (7) Mastering such processes and 'tools of mental work' as are needed for further development."¹ This study, however, deals specifically with that training which is called vocational or pre-vocational, and refers to all courses in schools for the blind other than literary and music. The outstanding problem in vocational training of the blind is to equip those so handicapped with such skill or skills as will enable them to become self-supporting. To that end schools for the blind have since their beginning (1785)² offered vocational courses.

The data upon which this study is based were secured from catalogs of schools for the blind and from questionnaires sent to all blind schools in the United States.

¹Ohio High School Standards, Edition of 1929, p.14.

²R. V. Merry, Problems in the Education of the Visually Handicapped, p. 21.

The study endeavors to show what vocational courses are offered, to define such courses, and to learn to what extent each is taught in the various schools for the blind in the United States. In addition to this survey, the study will attempt to show trends and to draw conclusions as to which subjects should be emphasized.

Throughout this study the term "Vocation" is used as synonymous with the second educational objective as expressed in this introduction, namely, "Making a Living." The term "General Educational Value" refers to one or more of the seven educational objectives which are above mentioned.

The question of vision in relation to vocations taught in schools for the blind might properly arise in connection with this study. We are, however, dealing here with the vocations taught by blind schools - not their admission standards.

In the following chapters the subjects are presented in order of the frequency in which they are taught in the residential schools for the blind - not not necessarily in order of importance.

CHAPTER II

CANING

Almost since the beginning of schools for the blind, caning has been one of the outstanding vocations taught. Ordinarily when caning is mentioned we think of cane seating. In its broader meaning, however, it refers to any type of cane work, such as, basketry, panel work, ribs of cheap umbrellas, saddles, couches, all types of seats, door mats, and in some parts of the East even houses. Rush and pith work also come under the general heading of caning. For the purpose of our study the term refers to seats and backs of chairs, panel work, and occasionally rush and pith work.

The cane strips which are used in ordinary cane seating are obtained from a peculiar class of palms known as ratans.¹ These plants, native to southern oriental countries, grow to an enormous length, reaching sometimes 500 feet. The stems seldom exceed one inch in diameter. This palm or cane is split into thin strips which are strong and flexible and easily woven into various designs.² The outer layer of the stem is used for caning

¹Encyclopedia Brittanica, Ninth Edition, Vol. IV, p. 805.

²Ibid., p. 805.

and the inner part for other types and parts of furniture. The illustrations on page 8 show the most common types of caning, namely, Honeycomb, Log Cabin, Twill, and Delaware. Honeycomb is the one most commonly used in cane seating, although we find much of the other types.

Table I shows the extent of this instruction in the schools in the United States. A total of twenty-six schools report that the subject has a place in their curricula. Caning, therefore, holds first place among vocational subjects. Fourteen schools report their objectives to be solely vocational; six state their objectives to be partly vocational and partly educational. Two schools report their objectives to be solely educational. The vocational objective, of course, means that the schools expect the graduates, or those receiving certificates in this work, to be properly qualified to make a living following this occupation. Considering the schools that report their total enrollment and also the number in caning classes and omitting the others, we have a total of 2,702 pupils of which number 521 or 19.3 percent are in caning classes. Dr. Best states that 6.4 percent of the male blind in the United States follow caning as an occupation,¹ and he also states that caning

¹Harry Best, Blindness and The Blind in the United States, p. 227.

10.4 percent of the total population of the United States in 1960.
8.6 percent of the total population of the United States in 1950.
coming as a consequence of the fact that the population of the United States in 1960 was 178,000,000 and in 1950 it was 150,000,000.

Harry Bass, Minneapolis and the Fight for the Future
Boston, p. 257.

is the poorest paid occupation followed by the blind.¹ In view of these facts, we question whether or not the teaching of caning in schools for the blind should rank in first place as it does according to this survey. The work is pleasant, clean and is all flat - there being no forms to shape as in basketry. The equipment for caning is simple and requires very little expenditure of money. Equipment for one person can be purchased for \$15.30.² Perhaps the above reasons explain why so many blind persons take up this work as a vocation. When, however, a blind person enters this type of work as a vocation he, of course, enters into competition with a machine made product. The honeycomb and twill can be made by machines and are used for reseating and repaneling a great deal of factory made furniture in which the section of seat or panel is wedged into place rather than being woven through holes in the frame. This type of reseating the blind person can do - buying the machine manufactured product and putting it into place. Other types, namely, log cabin, delaware and herringbone, do not come in commercial form and must be woven by hand. In these forms of caning the blind caner

¹Harry Best, Blindness and The Blind in the United States, p. 250.

²Business Records, Ohio State School for the Blind, 1933, p. 2.

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The median age at which children enter the caning course is eleven and three-fourths years, according to Table I. There is, however, a wide range of entrance ages, the lowest being seven and the highest fifteen. Table I also shows the time necessary for pupils to complete this course. Using only the reports of those schools stating a definite time for completion of the course, we find the average time to be two years. The range of time for completing the course is from three weeks to four years. Usually upon completion of this course, a certificate is presented to the pupil stating that he has finished the course and is recommended to the public as a person capable of doing this type of work.

Starling reports that in England caning is an occupation generally taught to females but that males may also become successful caners.¹ In Table I we find that thirteen schools offer the course to boys alone, not any offer it to girls alone, and twelve schools offer it to both boys and girls. In view of the fact that it is taught to girls in England and that a great many chair factories in the United States send the bottoms of their

¹S. W. Starling, "Cane Seating," World Conference on Work for the Blind, p. 124.

Work for the Blind, p. 104.
J. W. Scott, "Cane Reading," World Literature

chairs out to women in their immediate vicinity for caning, we conclude that the females should have equal opportunities with the males in this vocation.

If this work is not taught as a vocation, its place in the curriculum can only be justified by one or more of the following value; development of manual dexterity, avocational, part-time vocation, or general education. We also raise the point that this work may have an equal general training value with a great many other subjects presented in both sighted and blind schools.

Since Table I shows that only two schools use written courses of study, only one uses a text, and only one uses job sheets, it would seem that the caning course exists almost solely in the minds of the instructors and there would, of course, be no uniformity of content or procedure in the various schools.

SUMMARY AND CONCLUSIONS

In view of the fact that caning is the most poorly paid of any vocation followed by the blind, the large percentage of pupils taking this course cannot be justified.

Since caning offers equal vocational opportunities to girls as well as to boys, both should have equal opportunities in taking the course.

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Schools offering this course should, together, determine the most suitable age for beginning this work.

We question if the avocational and part-time vocational values can justify the time and money spent on this course.

Since only two schools have any written course of study, without doubt the content of the course is not presented in any uniform and unified manner. Schools offering this work should decide upon definite courses, objectives, and techniques of instruction.

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A very good article on cane.

Starling, S. W. "Blind Workshop Occupations," World Conference on Work for the Blind. New York: American Foundation for the Blind, 1931. pp. 123-124.

This reference discusses chair caning in England.

CHAPTER III

SEWING

Sewing was introduced into the Ohio school curriculum in 1838,¹ the first year after the school was established. It was not until 1872² that the girls were taught sewing by mechanical means. Preceding this date all sewing had been done by hand. Usually sewing includes both elementary and advanced work, both plain and fancy work and is done by hand and machine.

Table II shows that twenty-four schools report that they teach sewing to girls, no schools present the course to boys, while two do not state to whom they teach it. In the twenty-two schools teaching sewing to girls, and reporting the number pursuing the course, there is a total enrollment of 2,631 pupils of which number 638 or 23.3 percent are taking sewing.

Considering the records of the seventeen schools reporting a definite entrance age, we find the range to be from six to fourteen years and the median 10.4 years. Twelve schools state a definite number of years for the completion of the sewing course. The range is from two

¹Annual Report, Ohio State School for the Blind, 1838, p. 11.

²Ibid., 1872, p. 14.

years to eleven years and the median is 4.8 years. Oregon states the work is carried "on through high school." Texas reports "85 weeks" as necessary to complete the course. Washington reports "from 4th grade up" the work is given. Idaho makes the time optional. It is quite evident from these answers that there is a wide divergence in the amount of work given and the time for completing the same.

In Table II fourteen schools report the work to be vocational in its objectives; fifteen state their objectives to be educational while Perkins states its objective to be educational up to senior high school and vocational thereafter. We may infer that the schools have both objectives in mind but somewhat indefinitely. Perkins very clearly states its aims in this work.

Twelve have no written course of study; five follow a written course; one school, Tennessee, leaves the matter in the teacher's hands. Exactly the same numbers report that they do not and do use text books. They are not, however, the same schools. Twelve do not use job sheets; one school, North Carolina, uses job sheets.

We find in this study the same widely divergent procedures that we find in the preceding studies. Some divergence is necessary and desirable due to factors which vary in different parts of the country. This explanation

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cannot obviate the necessity for greater study of aims and procedure in this work by the various schools.

The illustration on Page 17 shows a few of the articles made in the sewing department of the Ohio school. We are safe in saying that any article made by a sighted sewer can be duplicated by the blind. It may take them longer but they can do it. Best states that this work is followed by 20.4 percent of the gainfully occupied blind female workers.¹ This occupation, therefore, leads all others for blind women.² Remuneration is comparatively low in this vocation. Best states that 76.9 percent earn less than one hundred dollars per year; 20.5 percent earn from one hundred to three hundred ninety-nine dollars per year; 2.1 percent earn from four hundred to seven hundred ninety-nine per year, and .5 percent earn from eight hundred to fourteen hundred ninety-nine per year.³ The Ohio Commission for the Blind reports that two hundred forty-four women in Ohio are engaged in hand sewing, and seventy-nine are engaged in machine sewing; all of these, however, pursue the work part time only.⁴ We do

¹Harry Best, Blindness and The Blind in the United States, p. 225.

²Ibid., p. 229.

³Ibid., p. 249.

⁴Letter from L. E. Bland, Field Representative of the Ohio Commission for the Blind, April 16, 1935.

Letter from J. J. Brown, Field
The Ohio Commission for the Blind, April 10, 1945

not have definite figures regarding their earnings.

We cannot, however, judge this work solely on the cash return to the blind women. A large majority of all blind women are homemakers and make their own clothing and that of other members of the family thus contributing to the economic welfare of the home. We consider this occupation to be one of the most important taught to blind girls.

CONCLUSIONS

In an elementary form we feel this work should be given to boys.

Uniformity of course content should be worked out by all of the schools cooperating.

More uniformity in entrance age, age range, and time spent on this course should be reached by the schools.

This course, without doubt, is one of the most valuable offered in schools for the blind.

Best, Harry. "Present Organization and Extent of Home Teaching," The Blind. New York: The MacMillan Company, 1919. p. 457.

New York Institute for the Education of the Blind, Principal's Annual Report. 1934. pp. 9-10.

Palmer, Eva B. "New Industries for the Blind," Report of the American Association of Workers for the Blind, 1927. p. 51.

CHAPTER IV

BASKETRY

Basket making is another occupation which schools for the blind have taught almost since their inception. Such a course was taught in the Ohio school in 1841.¹ There was some dissatisfaction with the course in 1858. The report for that year states, "We are not satisfied with brush and willow basketry - the material is not available and the products are hard for a blind man to market."²

There are, of course, many types of baskets. "Basketry, generally speaking, is the making of receptacles of useful or ornamental value by inter-weaving, lacing together or by overlapping and stapling together such materials as willow, rattan, and its products, reeds, grasses, plaited straws, splints of pliable woods, such as ash and hickory, and various manufactured substitutes as twisted paper, strips of cardboard, metal and wire."³

According to Table III twenty-six schools report a definite course in this occupation. Basketry, caning and

¹Annual Report, Ohio State School for the Blind, 1841, pp. 9-10.

²Annual Report, Ohio State School for the Blind, 1858, p. 10.

³L. J. Petzinger, Basketry as a Handicraft for the Blind (unprinted), Library Ohio State School for the Blind, 1935, p. 1.

sewing rank as the most frequently taught subjects in the schools cooperating in this study - each being taught in twenty-six schools. It is taught to both boys and girls. Four offer the instruction to boys only, four to girls only, fifteen to both boys and girls, and three do not specify the sex. The work covers such a wide range of materials and styles that it can profitably be given to both sexes. The median entrance age is 12.4 years and the range is from eight to sixteen years. The percent of the enrollment taking the course is 16.7. The expressed aims are as follows: vocational only, six; educationally only, eight; vocational and educational, eight. Three schools use written courses, seventeen do not; three schools use text books, seventeen do not; no schools use job sheets. The median time to complete the course is 2.8 years and the range of time is fourteen weeks to four years. This shows how widely the course content varies.

This vocation makes an appeal to many blind persons; the work is clean and can be easily learned if the person puts forth sufficient effort. The compensation, of course, varies with the person and the location. Harry Best says that a blind basket maker who earns from eight to twelve dollars per week is making a good wage

according to workshop standards for the blind.¹ The Ohio Commission for the Blind reports only nineteen part-time basket makers under its supervision. There are, of course, many independent basket makers in the state.

Blind persons come into competition with machinery and foreign made products. Leroy Petzinger reports that the president of one of the largest manufacturers of willow baskets in the United States informed him that "We discontinued the manufacture of willow baskets some time ago^{as}/with our American cost of labor we could not compete with the baskets which are being imported in large quantities from Europe and Japan."² Dr. French of the California school says that machinery is not likely to supplant handwork in this occupation.³ The chief threat seems to be foreign competition which, of course, could be corrected by a protective tariff.

The cost of necessary equipment for an individual basket maker is around seventy-five dollars. Prices on the necessary articles were secured from supply house catalogs. The prices, of course, will vary but seventy-five dollars will provide at least the minimum equipment

¹Harry Best, Blindness and The Blind in the United States, p. 517.

²Leroy J. Petzinger, op. cit., p. 6.

³R. S. French, From Homer to Helen Keller, p. 205.

necessary.

The illustration on Page 27 shows an exhibit of a few types of baskets made in the Ohio school. There are, of course, numerous styles.

The Ohio school is the only one reporting a course in willow basketry (see Table III-A), and in view of the small demand and foreign competition there is no justification for such an extensive course. A shorter course can be justified by educational value other than the vocational.

CONCLUSIONS

Basketry is one of the older trades for the blind which is being hampered now by foreign competition and the disuse of baskets by shoppers.

It has a good general educational value and can be correlated with the academic subjects.

The Ohio school cannot justify the length of its course in willow basketry in view of the points brought out in this study.

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CHAPTER V

PIANO TUNING AND REPAIR

Piano tuning was introduced into the Paris school for the blind some time during the decade 1830-1840. Perkins School for the Blind opened the first tuning department in American schools in 1870. The Ohio school opened its tuning department in 1878.¹ It was, however, soon discontinued but reopened in 1881² and has been in continuous operation since. This vocation has spread to many of the schools and has always been considered as one peculiarly fitting for blind persons because of their highly educated sense of hearing.

Piano tuning may be defined as "the adjustment of the twelve fundamental tones in all sections of the piano so as to accord with our musical standard."

Piano repair, of course, means to adjust and restore any maladjusted or broken parts of a piano.

Table IV shows that twenty-five schools state that they offer this work. Twenty-two of these schools with a total enrollment of 2,890 state that two hundred eight,

¹Annual Report, Ohio State School for the Blind, 1878, p. 11.

²Annual Report, Ohio State School for the Blind, 1881, p. 14.

³W. R. Niday, Principal, Ohio State School for the Blind.

or 7 percent of their pupils are studying this course. Twenty-four schools advise that the course is offered to boys alone. The other school, Mississippi, does not give any information as to whether the course is offered to boys only, girls only, or to both. It is fairly safe to assume, however, that this work is offered to boys only. At one time the Ohio school gave girls the privilege of following this course but the practice was soon discontinued. Nineteen schools report their objectives to be solely vocational; two report their objectives to be solely educational; one school reports its objectives to be both vocational and educational.

Piano tuning is especially suited to the blind as a vocation because they can perform the work even more successfully than sighted persons because of their well-developed sense of hearing. Many piano factories have long recognized this fact. A blind person can make minor repairs as efficiently as a sighted person. This occupation is dignified and in normal times is productive of a living wage. An average tuner can tune four pianos daily receiving an average of three dollars each. Before the depression the average tuner made fifteen dollars per week. Now, however, it is practically impossible for the average tuner to earn a living if he depends upon tuning

alone. The cost of equipment is reasonable, the necessary tools being obtainable for from forty to fifty dollars. Harry Best says that 7.6 percent of the blind are engaged as piano tuners¹ and that 50.7 percent of those so engaged earn eight hundred dollars or over annually.² His book although revised and reprinted in 1934 refers to data which were collected in 1920.

The advent of the radio and talking picture has further militated against the success of this vocation. We feel, however, that the piano will always hold a strong place in American homes and that the alert tuner can always find work to do.

Table IV shows that the median entrance age as reported by the various schools is 15.2 years. The range of entrance ages is from thirteen to seventeen years. The median time for completing the course is 3.25 years; the range is from two to six years. Seven schools report that they follow a written course of study; twelve schools report that they do not. Eight schools report that they use a text book; ten report that they do not. No schools use job sheets in this work. It is evident from these reports that a better organization of this work is

¹Harry Best, Blindness and The Blind in the United States, p. 225.

²Ibid., p. 250.

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desirable and that there should be more uniformity regarding the entrance age.

The illustration on Page 34 shows a piano torn down by the blind boy who is standing near it. This piano in a few days was repaired, reassembled and tuned solely by the efforts of the boy.

CONCLUSIONS

Piano tuning still ranks high as a vocation for blind men regardless of the depression, advent of the talking picture, and the wide-spread use of the radio.

Schools should place more emphasis upon instruction in piano repair since this work is closely allied to tuning.

The work has an educational value comparable to that of manual training and machine shop taught in sighted schools.

Schools for the blind should together work out a more comprehensive and definite course of study in piano tuning and repair. They should also try to ascertain the most fitting entrance age and minimum and maximum number of hours for completing the work.

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CHAPTER VI

WEAVING

In the weaving shop the blind are taught to make various kinds of articles and materials. The ultimate aim is to teach the pupils to produce useful and salable articles. It must be kept in mind that the products are mostly household articles and care must be given to the choice of patterns and color combinations. The pupils are also taught to set up their own looms. Some of the articles made are rugs, pillow covers, dresser scarfs, bags, luncheon sets, purses, and table runners. Weaving provides excellent hand training and is contributory to manual dexterity so necessary for the blind person.

Weaving in one form or another has been taught in the Ohio school since 1841.¹ Manila mats and carpets were woven at that time. Worsted baskets, flowers, lamp mats, silk purses, net bags, and watch guards were also made in the weaving department. The present weaving department, following the aims of the preceding paragraph, was established in 1908.² The Ohio school may be taken

¹Annual Report, Ohio State School for the Blind, 1841, pp. 9, 10.

²Annual Report, Ohio State School for the Blind, 1907-09, p. 14.

as typical of the other schools in the United States. Reports show that when one school begins teaching a trade or vocation it soon is taken up by many other schools. The range of vocations for blind persons is so narrow that educational institutions are constantly on the alert for new fields of endeavor.

In Table V it is shown that twenty-four schools report a course in this work. Considering the schools that report both their total enrollment and the enrollment in this work, we find the following: enrollment 2,402; number in course 195; percent of enrollment in course 8.1 percent.

We find here a vocation considered suitable for both boys and girls since thirteen schools present the course to both sexes. It has been amply demonstrated that men as well as women can do this work most acceptably, especially the heavier phases, that is, rugs, carpets and heavy tapestries. It is, however, still considered predominantly an occupation for women since nine schools teach it to girls alone. Two schools fail to specify the sex to which it is taught.

There is unusual agreement regarding the entrance age among the schools - eight out of twenty-two stating that this age should be fourteen years. The median entrance age is 14.43 years; the range is from eight years to

fifteen years.

Ten schools have as their sole aim the vocational one; three state their aim to be solely educational; while eight say their aims are both vocational and educational. Certainly this course well taught has a splendid general educational value.

Here again we see the lack of a properly organized and definite course of study; four schools only have a written course and fourteen do not; two use text books and sixteen do not; four use job sheets and twelve do not. Although the teacher may be well prepared her work would be much more effective were a definite procedure outlined and given to the pupils as a guide.

Again we find in this course an unusual agreement among the schools regarding the time to complete the course - 2.4 years being the median with eight of sixteen schools reporting that two years is the length of time necessary for completion of the course. ^{The range is from} ~~eleven weeks~~ to four years.

As a vocation for the blind, weaving has much to recommend it. Necessary equipment can be purchased for about one hundred dollars. The work is clean and dignified and just now is being taught as relief projects to sighted persons in various parts of the country,

According to Harry Best¹ .9 percent of the blind were following this work in 1920. The remuneration is comparatively low and no definite figures can be secured. Six adults under the supervision of the Ohio Commission for the Blind follow the work as a part-time vocation.² So much depends upon the individual regarding the sale of his product. Some persons have been successful in building up a clientele to take their products while others have difficulty in disposing of even a minimum amount of their work.

Machine competition has, of course, cut down the attractiveness of weaving as a vocation. Some articles made by weavers, however, are difficult to make by machine and there is always a great interest in hand-made articles. In the light of available records we should say that weaving can be recommended as a part-time vocation.

From the illustration on page 43 a good idea can be secured regarding the variety of articles made in the weaving department of the Ohio school.

¹Harry Best, Blindness and The Blind in the United States, p. 225.

²Letter from L. E. Bland, Field Representative of the Ohio Commission for the Blind, April 16, 1935.

CONCLUSIONS

Weaving is a clean and dignified vocation. It is most valuable in the development of manual dexterity.

There is unusual agreement among schools regarding the entrance age and time to complete the course.

It can be recommended as a part-time vocation to supplement income from other sources.

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CHAPTER VII
MANUAL TRAINING - CARPENTRY

The term manual training as formerly used in public schools referred to woodwork. This name is now considered obsolete and the broader term of industrial arts is used to include such courses as woodwork, machine shop, sheet metal, et cetera. We note, however, that some schools for the blind still use the expression to include all instruction which tends to teach the hand to obey the mandates of the educated brain.

This discussion deals specifically with carpentry or woodwork as taught in blind schools. Some courses include a general introduction to the names and uses of the simpler tools which may be used later in life by the pupil in doing repair work in and about his home or workshop. Any such course should in our opinion be classed as pre-vocational or exploratory. Certainly if a blind man expects to follow any phase of carpentry he must have more training than he can possibly receive in such a course in a school for the blind.

Table VI shows that twenty-two schools give a course in this work. Nineteen schools offer the work to boys only; three do not specify the sex to which this work is

offered. The median entrance age is 12.5 years; the age range is eight to sixteen years. Using the enrollments of the schools which give both their total enrollment and the enrollment in the course, we have the following figures: total school enrollment, 1990; number taking the course, 348; percentage taking the course, 17.4.

Vocational objectives are set up in five schools; educational objectives in eight schools; vocational and educational in six schools. Regarding printed courses of study we find the following to be true: three use a written course, thirteen do not; two use texts, thirteen do not; one uses a job sheet; thirteen do not. Evidently the type of the work is dependent upon the instructor. The median time to complete this course is 4.5 years. The range of time to complete the course is from thirty-eight weeks to "unlimited."

The aim of the work in the Ohio school is to acquaint the pupil with the tools ordinarily used about the house and train him in the simple uses of these tools. He will then be enabled to do ordinary repair work around his home. The course is pre-vocational and exploratory.

CONCLUSIONS

This work would probably better be called general shop.

It might well be offered to both boys and girls.

The major aims should be pre-vocational and exploratory.

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CHAPTER VIII

APPLIED ARTS

Knitting, Crocheting And Bead Work

"Applied Arts as taught in the Ohio school includes knitting, crocheting, bead work and braiding. The purpose is to gain a knowledge of its processes and to secure sufficient practice in their execution to develop skilful and efficient production."¹

This work has been carried on almost steadily in the Ohio school since it was established. Knitting was begun in 1838;² bead work in 1850;³ raffia in 1903;⁴ palm leaf hats braided in 1860;⁵ fancywork, general course, in 1907.⁶ Other reports of the Ohio school indicate that knitting and crocheting have been carried on for almost one hundred years. Reports indicate that these courses have always been "standbys" for girls in other schools for the blind.

Table VII refers to knitting as taught in the various schools. When we consider only those schools reporting their enrollment and the enrollment in the

¹Emily C. Woodward, Applied Arts, Teacher Ohio State School for the Blind (unprinted).

²Annual Report, Ohio State School for the Blind, 1838, p. 4.

³Ibid., 1850, p. 13.

⁴Ibid., 1903, p. 15.

⁵Ibid., 1860, p. 9

⁶Ibid., 1907, p. 5.

knitting course, we find the following: school enrollment, 2434; enrollment in course, 373; percent of total school enrollment in course 15.3.

This work is primarily for girls - eighteen schools reporting that it is given to girls only; two schools present the subject to both sexes; one school does not specify sex. The median entrance age is eleven years. The range is from eight years to fourteen years. The following facts are significant regarding aims of the course: vocational aim, four; educational aim, seven; vocational and educational, six; and four do not specify aims. These reports indicate that more emphasis is placed on non-vocational aims than in the preceding courses of this study. Doubtless this is due to the fact that the remuneration is not so great. No figures are given specifically as to the economic returns from this work. So many blind persons as well as sighted use this work as a pastime or leisure occupation although properly followed it has a fair remunerative return. It can be, however, justified for blind girls on the basis of a leisure time activity.

Reference to Table VII shows that very few schools use printed or brailled outlines - the teacher verbally directs the children and demonstrates to them with her own hands the proper procedure. This table further shows

the median amount of time spent on this work is three years.

The following quotation from an article written by Miss Woodward and applicable alike to all kinds of so-called fancy work admirably states why this type of work should be taught to blind pupils:

"I would recommend that every girl should receive a thorough course in this line of work. The value of training the hand as well as the mind is of utmost importance to blind children. The constant urge to do and express one's best makes handwork helpful in the training of the child. The relaxation it affords from other studies is of great value. It gives the worker an opportunity to use his own skill and ingenuity in the making of new designs. It develops originality and the natural capacity for creative ability which is the highest joy. Then too the gratifying sensation of having something growing in one's hands that has a creative and useful quality is being produced. Also the possibility of adding to one's income (which many do) and I think it stands superior to most of all other diversions in furnishing pleasant and agreeable occupation for leisure time. Without doubt we must look upon the present encouragement of the handicrafts as very much worth while from every standpoint. Now that everywhere are evidence of this vital interest in handwork, I would recommend strongly the teaching of this work in blind schools."¹

Since knitting and crocheting are so closely allied the preceding discussion is applicable to both. We are, however, presenting and briefly discussing Table VIII which specifically refers to crocheting.

Considering the total enrollment of all schools that also give their enrollment in crocheting, we have the following figures: total enrollment, 1990; enrollment in this course, 238; 11.9 percent of total enrollment in course.

¹Emily C. Woodward, op cit.

The same information for knitting is as follows: total enrollment, 2002; enrollment in course, 330; 16.4 percent of total enrollment in course. This indicates that the subject is quite widely taught. The median entrance age is 10.33 years and the median time spent on the course is four years. The range of time spent is from one year (New York State) to eight years (Indiana). The age range for those taking this work is from nine years to sixteen years. Five schools state that they pursue the vocational aim only; nine the educational aim only; three both educational and vocational aims.

CONCLUSIONS

This work has great value as a part-time or supplementary vocation.

The work provides leisure time activity.

Many useful articles for the home are made by persons trained in this work.

The "manual training" or "hand training" is attained by a carefully taught course in this work.

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CHAPTER IX

BROOM

The making of brooms has always been considered as a vocation especially suited to blind men. Harry Best says,

"The blind are found to cluster rather heavily in certain particular callings. Of all the male blind listed, nearly three-fifths (58.4 percent) are found in seven occupations, each having more than 5 percent of all gainfully employed. These are broom making, farming, retail dealing, piano tuning, playing and teaching of music, chair caning, huckstering and peddling."¹

He further states:

"The occupation which draws a larger number of blind males than any other is broom making, a trade generally looked upon as peculiarly suited for the blind. It is often given to them as their first industrial effort, to men learning a new pursuit it is offered more frequently than any other. In it are over one-eighth (14 percent) of the male blind who are gainfully employed."²

Reference to the annual reports of the Ohio school probably tell a story typical of the other blind schools regarding the work of broom making. This work was begun in the Ohio school in 1850.³ By 1858 no other vocational work was taught.⁴ Between the years of 1840-1852 "Not one

¹Harry Best, Blindness and The Blind in the United States, p. 226.

²Ibid., p. 226.

³Annual Report, Ohio State School for the Blind, 1850, p. 13.

⁴Ibid., 1858, p. 10.

person was earning anything except in broom work."¹ In 1858 girls began to study broom making.² It was about the only vocational subject taught without interruption until 1914 when it was dropt by the Board of Administration.³ The work was again started in 1920 and continues at the present time.

In view of the strong place which this subject has held as a vocation for the blind, we are somewhat surprised to find that among the schools cooperating in this study it ranks ninth in frequency with which it is taught. This no doubt is the result of machine competition in making brooms and the decrease in the use of brooms in homes, offices and factories. It is, of course, a conceded fact that mechanical cleaners are rapidly coming into wider use. The output of shops operated by the blind, however, is still around six million brooms per year.⁴ The Ohio Commission for the Blind reports that forty-four men in Ohio are following broom making as a full time occupation.⁵

¹Annual Report, Ohio State School for the Blind, 1858, p. 13.

²Ibid., p. 9.

³Ibid., 1914, p. 303.

⁴Harry Best, Blindness and The Blind in the United States, p. 516.

⁵Letter from L. E. Bland, Field Representative of the Ohio Commission for the Blind, April 16, 1935.

Reference to Table X shows some very interesting and significant facts regarding this work in schools for the blind. Considering the schools that report both their total enrollment and the enrollment in this course we find the following figures: total enrollment, 1271; number taking the course, 151; percent of total enrollment taking the course, 12. All schools report that the course is offered to boys only. The median entrance age is 14.6 years, and the age range is from ten to sixteen years. Thirteen schools state their aim to be vocational only; one school's aim is both educational and vocational. No school uses any written course of study. The median time to complete the course is 2.5 years. The range of time for completing the course is from six weeks to four years.

It is readily seen from the table that the emphasis in schools for the blind is vocational.

We quote from an article by James H. McAuley regarding cost of equipment for a one-man shop, machine competition, suitability of this vocation for blind men, and why the subject should be taught in schools for the blind:

"New, durable, practical equipment can be purchased for two hundred twenty-five dollars. Quotations were obtained from C. P. Johnson and other broom machinery manufacturers, March 25, 1935.

"A modern broom factory equipped with \$2,300 worth of machinery can be run with ten men including the business manager and have an output of 50 doz. brooms per day; an average of 5 doz. brooms per person per day. A

Baltimore Stitcher will sew 6 doz. brooms an hour. The average blind broom maker will sew but 6 brooms an hour. Information gathered from correspondence with C. P. Johnson Broom Machinery Mfgr., Amsterdam, N. Y., and the Baltimore Broom Machine Co., Baltimore, Md., March 25, 1935.

"The making of brooms does not require outstanding skill and ability. In a few of the processes partial sight is advantageous to the shape and appearance of the finished product. In most of the processes sight does not contribute to the quality of workmanship but plays an important part in quantity production. Quality in sorting material can be judged better by touch than by sight.

"In view of the facts in the preceding paragraph, brooms made by sighted men, with quantity as a goal, fall short in quality when compared with brooms made by blind workmen. Also, consumers are rather well educated to the quality of blind-made brooms and they will buy them and at a substantial price too. From an educational standpoint: if broom making is properly taught it is fascinating and holds the pupil's interest. It is not tedious, it is not extremely difficult, the finished product builds up rapidly, and the material results of the pupil's efforts are very evident in a practical commercial product of his own creation. From a psychological standpoint: we educate for usefulness to humanity under the guidance of a higher power. That usefulness is made possible by education but is nourished by happiness. Gainful occupation counts many points in the score of happiness, and above all where the blind are concerned. From a purely economic standpoint: I question the justification of teaching broom making in schools for the blind. But in view of the educational theory concerning practical arts in public schools, this could be a minor point.¹ I still feel that the teaching of broom making in schools for the blind is well worth the time, effort, and expense involved." ¹

¹James H. McAuley, Broom Making in Schools for the Blind, March 25, 1935.

CONCLUSIONS

Broom making is one of the oldest trades followed by the blind. Hand made brooms are not so widely used as formerly because of the machine made product and because of the wider use of mechanical cleaners.

The field is still wide enough to justify this course in the curricula of schools for the blind.

Educational aims other than the vocational contribute to the value of instruction in broom making.

Criticism that boys in blind schools are not old enough to profit by broom instruction cannot be substantiated any more than that high school girls are too young to profit by home economics instruction or that high school boys are too young to profit by machine shop industrial arts.

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CHAPTER X
HOME ECONOMICS

Home Economics may be defined as the study of food, clothing and shelter from the social, economic and esthetic points of view.

Perhaps the growth of this course in schools for the blind paralleled its inception in the public schools. In 1906 it was introduced into the Ohio school.¹ It was dropt by the Ohio Board of Administration in 1914.² It was resumed in 1915 and continues at the present.

This course is perhaps the most important one taught to blind girls. Since the range of occupations open to blind females is much narrower than with blind males as a group they are not nearly so self-supporting. Best says that of the male blind gainfully employed less than one-half (46.2 percent) are self-supporting. Less than one-third (30.5 percent) of the female blind are so. For both sexes together the proportion is 43.4 percent.³ As a result of this economic condition a large majority must

¹Annual Report, Ohio State School for the Blind, 1906, p. 10.

²Ibid., 1914, p. 303.

³Harry Best, Blindness and The Blind in the United States, p. 243.

remain with relatives and do some form of housework. Scientific knowledge of this work is of inestimable value to the blind girl who marries and has a home of her own.

This course has a natural appeal to girls and a blind girl readily learns to find her way within fixed surroundings.

Table XI shows that fourteen schools are offering this work. Eleven offer it to girls and two to both boys and girls. Considering the total enrollment of schools which offer this course and report both their total number of pupils and the number enrolled in the work, we find the following: total enrollment, 1664; enrollment in the course, 202; percentage of total enrollment in course 12.1. The age range of enrollment is from ten years to seventeen years and the median age of those pursuing the course is 14.75 years. The vocational and educational aims predominate - eight giving such information. Four schools have as their aim the educational one only. Eight schools follow written courses, four do not; seven use text books, four do not; two use job sheets, six do not. From the answers received this course seems to be better organized than most of the others. The median number of years to complete the work is 2.25; the range of the work is from two years to four years.

We feel that every school for the blind should have a strong course in this work for the reasons mentioned earlier in this discussion. While not many blind women will find it a direct source of revenue they all will benefit by a properly organized and well presented course. Since the lack of one sense ordinarily causes the person to develop other senses to a greater degree, a blind girl is bound to become a systematic planner and efficient manager or a good cook and a resourceful person in general.

As a most important adjunct to the teaching of this work we emphatically recommend a practice apartment in which groups of girls may live with their teacher, carrying on practical home-making in a scientific manner. Such procedure is followed in some of the schools, namely, the New York State school and the Ohio school. The illustrations on pages 74 and 75 give a graphic idea of the apartment in the Ohio school.

CONCLUSIONS

Home Economics is the most valuable course taught to blind girls. Every school should offer a strong course in this work.

Elementary Home Economics should be taught to blind boys. This is being done in sighted schools.

The course should be carefully checked with that taught in the public schools and only such adaptations made as are necessary to suit it to the needs of the blind girl.

The use of a practice house or apartment is strongly recommended.

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CHAPTER XI
BRUSH AND MOP MAKING

Brush Making

"The craft of brush making has long been a favorite one for the blind, and, in consequence, has been adopted by many workshops for the blind; but only in part has this become possible, as the making of certain brushes has proved to be a too highly specialized craft for the blind to be successfully engaged in it."¹

According to Starling's study, brush work may be classed as a limited occupation for blind workers. James H.

McAuley says there are three kinds of solid back brushes, namely, "drawn-wire, glue and pitch set, and stapled."²

These types he defines as follows:

"Drawn-wire brush making is the making of solid back brushes by drawing the centers of tufts of bristles, hair or fibre, into tapered holes with loops of wire. The wire continues from hole to hole making a loop at each hole. The holes are drilled through properly shaped blocks or through one piece of a split block of wood, metal, fibre composition, hard rubber, celluloid, etc. When split blocks are used one piece of the block is attached to the drilled piece covering the wire and the exposed ends of the holes."

The tables in this chapter are so short that the information is available at a glance; hence only the most important data are discussed.

¹S. W. Starling, "Blind Workshop Occupations," World Conference on Work for the Blind, 1931, p. 125.

²James H. McAuley, "Solid Back Brushes," Vocational Study, Ohio State School for the Blind, 1935.

Table XII shows that nine schools are presenting this course to their students. The percentage of enrollment taking this course is 8.5. Six schools offer the work to boys only and one offers it to girls and boys. The median entrance age is twelve years and the range of entrance is from ten to sixteen years. The aim is predominantly vocational. Not any of its schools follow a written course of study. The median time for completing the course is one year and the range is from "optional" to one year.

Due to machine manufactured product this type of brush making is not very remunerative for a blind person. The course, if taught at all, should be in conjunction with some other occupation.

Glue and Pitch Set Brush Making

Starling's discussion of this type of brush making¹ leads us to believe it is quite common and remunerative in Europe. The article quite clearly describes how the work is done and states that it is followed by both men and women.² Since no school reports the teaching of the

¹S. W. Starling, op. cit., p. 125.

²Ibid., p. 126.

course, no further discussion will be here presented.

The Virginia school reports a six weeks' course in Wired Split Block Brush Making which is quite similar to the Drawn Wire Brush.

Brush and Mop Making among the adult blind of Ohio is not very widespread according to a letter from L. E. Bland, field representative of the Ohio Commission for the Blind, who says that there are twelve part-time brush makers and two part-time mop makers under the supervision of the Commission.¹

MOP MAKING

Stick Mop Making

This type of mop is a very simple one. The desired amount of material is distributed about the end of a stick and securely fastened by wrapping it with wire. A broom machine can be used for doing the wrapping. Although only a small amount of money is necessary (about \$50) to equip a one-man shop, the work is not recommended as a vocation for the blind. Large factories with extensive buying power can manufacture the product so cheaply that a blind person cannot compete. Penal

¹L. E. Bland, op. cit.

institutions also make this product extensively. Table XIII shows the schools offering this course. If it is taught at all it should be presented as a pre-vocational course or as a project in connection with some other course.

Sewed Mop

James H. McAuley defines sewed mops as follows:

"Sewed mop is the making of mop heads by sewing a band of heavy cloth around the center of an evenly cut bundle of yarn. This is done in such a way as to make the center of the bundle of yarn from four to six inches wide and less than one and one-half inches thick."¹

Table XIV shows that only four schools present this course. A few workshops and many penal institutions do this kind of work; it could scarcely be considered a vocation for the blind. A workshop for one man may be equipped for \$250.

The schools offering this course are very probably using it for exploratory purposes. It is not recommended as a course to be taught with the vocational aim in view.

¹James H. McAuley, "Sewed Mop Making," a vocational study, Ohio State School for the Blind, 1935.

Twist-In-Wire Mop

This type of mop is made by placing the desired amount of yarn between two wires and then twisting them to hold the material in place. Such mops are of various sizes and shapes and are used for a variety of purposes as washing floors, dusting, washing dishes and cooking utensils, et cetera. This occupation has not been widely taught in schools for the blind.

Twist-In-Wire Brush

Table XV gives information concerning both Twist-In-Wire Mop and Twist-In-Wire Brush. Ten schools offer the course with a total enrollment of 1116 and of this number 68 or 6 percent are enrolled in the course. Eight schools offer the course to boys only and one offers it to both boys and girls. The median entrance age is fifteen years and the range is from twelve to seventeen years. Six schools report a vocational aim and three both vocational and educational. Six schools state that they have a written course of study and three say they do not have. Not any schools follow job sheets or text books. The range of time for completing the work is from four weeks in Texas to three years in Ohio. This indicates a very wide divergence in content and aims of the course. There is

such a variation in the lengths of the course that no median of value could be computed.

This type of mop and brush making is quite suitable for the blind. Sufficient skill and speed can be acquired by a capable and industrious blind man and the product is salable. Machine competition, if any, can be successfully met. A one-man shop can be equipped for one hundred dollars for making both the twist-in-wire mop and twist-in-wire brush. We predict an expansion of this work in schools for the blind.

CONCLUSIONS

Brush and mop courses are not widely taught in schools for blind, no doubt, because of machine competition and lack of consideration of vocational possibilities.

Twist-in-wire brush and twist-in-wire mops present the best vocational field in this type of work. The blind can certainly compete in these lines and produce a salable product.

Other types of brush and mop making should be presented as projects in regular vocational courses.

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CHAPTER XII

FARMING - POULTRY RAISING

At first thought it would seem that farming as an occupation would be impossible for the blind. Best states that next to broom making more blind males are engaged in farming than any other occupation (11.2 percent).¹ This, he further states, is probably due to two reasons.

"First, farmers represent the largest occupational class in the population, as a whole It is quite possibly the case secondly, that many are enumerated as farmers, when in fact farming was the occupation engaged in prior to the oncoming of blindness, active participation in it thereafter being limited, extending little beyond general oversight and direction."²

According to Table XVI-A only three schools - Missouri, Perkins, and Tennessee report a course in any phase of general farming.

We urge students of occupations for the blind to read the story of a successful blind farmer by Reinette Lovewell.³ This account definitely shows that a blind man can become a successful farmer doing practically everything a sighted man can do.

The specialized field of poultry farming presents

¹Harry Best, Blindness and The Blind in the United States, p. 226.

²Ibid., p. 226.

³Reinette Lovewell, "Farming Without Sight," Outlook for the Blind, Vol. XXI (June, 1927), p. 21-23.

many examples of highly successful blind men. We also find that seven schools offer a course in this work (See Table XVI). Reference to this table shows that four schools offer the course to boys only and three schools offer it to both boys and girls. Based on the total enrollment of the schools reporting both their enrollments and the enrollments in the course we see that out of an enrollment of 961 pupils 43, or 4.4 percent are pursuing this course. The entrance range is from twelve years to high school, probably fifteen years. The median entrance age is fourteen years. Three report their aim to be vocational only, two educational only, and two both educational and vocational. Some follow written courses while others do not. The median time to complete the course is two years, and the range of time to complete the course is from five-tenths of a year to two years.

Perhaps the most outstanding success as a poultry farmer is George Hagopian of Wrentham, Massachusetts. The story of his unusual success is told by Frederick H. Stoneburn in the Outlook for the Blind. Mr. Hagopian demonstrates what a blind man can do if he has the determination and industry.

¹Frederick H. Stoneburn, "How A Blind Man is Making Money with Rhode Island Red Hens," Outlook for the Blind, Vol. XIX (September, 1925), pp. 45-49.

Many schools are unable to offer practical courses in farming, poultry raising, et cetera, because they are located in cities. We feel that the many successful blind poultry raisers commend this course strongly to the administrations of schools for the blind.

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CHAPTER XIII

OTHER VOCATIONAL WORK

The subjects presented in the following pages are presented by the various schools, we assume, as exploratory courses. It is most certainly to the credit of such schools that they are endeavoring to find new fields for the visually handicapped. Schools have, too long, accepted the traditional vocations as the only ones open to the blind. While we are not so optimistic as to believe the problem of blind employment will be solved by any or all of the courses mentioned in this chapter, we are quite certain that many will become part-time vocations and perhaps a few will become well established as fields for the blind.

Since the tables presented in this chapter are short and the information may be secured at a glance we are not discussing any of them except those referring to Hammock Making and Tennis Racket Restringing.

AUTO MECHANICS

Many persons who are unfamiliar with what the blind can do feel that it is impossible for a blind boy to repair an automobile. Admittedly there are many things connected with this work which he cannot do, namely, refinishing,

machining delicate parts, et cetera. He can, however, do most of the work necessary in overhauling a motor. Perhaps the best argument substantiating that this work can be done by the blind is to point out that within the last two years the blind boys of the Ohio school have overhauled and repaired successfully the following makes of cars: two Overlands, one Studebaker, one Chevrolet, one Buick, and one Ford. On these motors they have cleaned, repaired and replaced parts and adjusted the motors so that they run in a satisfactory manner. In Ohio at least two blind men are successfully operating their own garages employing, of course, what sighted help is necessary to do a completely reconditioned^{ing} job.

It will be noticed from Table XVII that three schools are now offering this course.

UPHOLSTERY

Since the advent of upholstered furniture there has been an increasing demand for upholsterers both for the new product and for replacing the worn out upholstery. The possibilities of this work for blind was pointed out to the administration of the Ohio school by a local furniture factory superintendent. During the year 1934-1935 a start has been made and we now feel that there is a real opportunity for the blind in this work. Three schools are now offering courses in this occupation.

SHOE REPAIR

In 1839 the Ohio school introduced shoe making.¹ We judge from reading the early reports that it was more "shoe repair" than "shoe making." Michigan, North Carolina, and West Virginia (negro division) are the only schools reporting such a course now (see Table XIX).

Since highly specialized machinery is now used for shoe repair we do not see how this subject could offer a vocational field for the blind, although the Outlook for the Blind reports a most successful project in machine shoe repairing by blind men.²

CERAMICS

Perhaps our question was misleading regarding this work. According to Table XX Arizona, Michigan, and Mississippi offer such a course. Certainly it cannot be such a vocational course as is offered by colleges; in our opinion clay modeling in elementary form is about the limit in this field for a blind person. It cannot offer a distinctive vocational field to the blind.

¹Annual Report, Ohio State School for the Blind, 1839, p. 3.

²Melvin Haslip, "Machine Shoe Repairing," Outlook for the Blind, December, 1926, pp. 43-45.

MILLINERY

Arkansas and New York (State) offer this course. (See Table XXI). New York offers a much more distinctive course than Arkansas. Many of the schools offer the rudiments of millinery in connection with their home economics courses. While there are some operations in millinery that can be done by the blind, namely, making flowers for the hats, et cetera, we do not see how it could become an occupational field in which the blind can compete with the seeing.

ROPE MAKING

Idaho and Missouri (Table XXII) give a course in rope making. Due to the fact that ropes are made almost solely by machinery we do not see how this course could have any value except to train the pupil to use his hands with greater dexterity.

ASSEMBLY WORK

Perkins Institution is the only school reporting such a course (Table XXIII). Many schools, however, present assembly work in an elementary form, namely, the Ohio school purchases leather cut into forms for making leather belts. The pupils very readily assemble the parts into the belts. This same procedure can be followed.

with other articles. It is very doubtful if any school offers or will soon offer any course in "assembly work" as the term is interpreted by factory management.

RADIO

Iowa reports a course in this work (Table XXIV). Whether this school presents a course in radio construction and technique or radio broadcasting the report does not show. It would be most remarkable if the blind pupil could do much more than assemble some of the more distinctive parts of the set and help build the cabinet. Radio broadcasting would, of course, come under the heading of music.

LEATHER BELTS

Missouri offers a two weeks course in leather belt-making (Table XXV). It is doubtful if this work is much more than that mentioned in a preceding section under the heading "Assembly Work." Certainly it could not be considered vocational.

TENNIS NETS - BASKET BALL NETS

Overbrook school reports this course as being offered and requiring one year for its completion. From the information presented in Table XXVI Overbrook must

consider this one of its standard vocational courses. This type of work merits consideration by other schools.

DRESSMAKING

Dressmaking is reported by the West Virginia school as being one of its major vocational courses for girls. Table XXVII shows that the course is of two years duration. It is possible that other schools cooperating in this study considered dressmaking as a part of the sewing course which is discussed elsewhere in this thesis. The Ohio Commission for the Blind reports that seventy-nine women are doing part-time machine sewing and two hundred forty-four are doing part-time hand sewing.¹ These women are doing work for the Commission other than dressmaking but requiring skill that can be used in the making of various kinds of dresses.

SHOPPING BAG

Because of the present trend of shoppers to use paper shopping bags this course is not very widely taught. Only four schools report a specific course; two others report that it is taught in connection with other courses. (See Table XXVIII).

¹L. E. Bland, op cit.

MATTRESS MAKING

Machine competition has invaded this field and practically crowded out hand labor until the advent of the FERA mattress factories. In 1873 the Ohio school made all their own mattresses.¹ Table XXIX shows that this work is not now very widely taught in schools for the blind and it is likely to be taught less when economic conditions become normal.

MAT MAKING

It is probable that the schools reporting a course in mat making (Table XXX) offer the work in connection with some other course. A few of the workshops for adult blind make door mats as a side line. It is at the best a supplementary occupation.

HAMMOCK MAKING

This course might be classed as exploratory or supplementary to other vocational work. Table XXXI shows that eight schools offer the course. A glance at the table shows the following facts: five schools give the work to boys, three to both boys and girls; the percentage of those taking the course in relation to the

¹Annual Report, Ohio State School for the Blind, 1873, p. 10.

total enrollment is twelve; the aims are about equally divided between educational and vocational; no schools have any kind of written outline; the median time to complete the course is one year; the median entrance age is 12.5 years.

The course in its present status can be considered little more than a part-time or "fill in" vocation.

TENNIS RACKET RESTRINGING

This course also is taught as a part-time vocation. Many blind persons who make brooms or baskets, or follow some other major work for the blind, supplement their incomes by restringing tennis rackets. Table XXXII gives the following interesting information: it is taught to boys only; the median entrance age is 16.37 years; the median number of years to complete the course is one; the range of time for completing the course is from six weeks to one year; there are no written courses of study; the major objective is vocational; based on the total enrollments of the schools reporting both their enrollments and the number pursuing the course the percentage is 3.4.

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RECOMMENDATIONS

1. It is proposed that an annual report be made by each school for the blind to the secretary of the American Association of Instructors of the Blind. This organization could act as a clearing house for useful information.

2. It is recommended that a complete and accurate survey be made in each state of the economic condition of the adult blind. This survey should also ascertain the possibilities for employing the adult blind. A survey of this type could be carried on by existing organizations.

3. It is further recommended that the vocational teachers in schools for the blind make a complete study of existing vocational courses and using their findings and the findings of the survey above suggested outline and redirect the emphasis on this phase of work. It is also recommended that the vocational teachers and the superintendents of schools for the blind prepare and have brailled adequate courses of study in whatever courses the need exists.

4. To the critics of vocational work in schools for the blind we suggest that they provide us with something better before they advocate so strongly the elimination of what we now offer. It should be borne in mind that

most schools for the blind are grade and high schools only. We do not expect the public high schools to turn out a graduating class that becomes self-supporting immediately without any additional training. If this is expected of the schools for the blind, additional funds should be provided so that they may give lengthened courses in their vocational work.

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